SPRAY-FORMED ARTICLES MADE OF PSEUDO-ALLOY AND METHOD FOR MAKING THE SAME

Abstract

Method and arrangement for spray forming an article. The method includes spraying a plurality of metal streams upon a low-heat resistant model and thereby forming a spray formed article. Each of the plurality of metal streams is composed of moltenized droplets, and as between the plurality of metal streams, each is composed of different constituent elements. In the spray form process, conditions of the metal streams are controlled, particularly around the time that the droplets land, to prevent adverse affects such as melting or burning the master model. The spray conditions are controlled in such a manner that the individual metal droplets forming the metal streams remain substantially segregate. The segregated state is maintained through out solidification so that the resulting spray formed article is composed at least partially of psuedo-alloy.